

TCSMA BLIND TOROIDAL CONDUCTIVITY TRANSMITTER



4-20mA isolated output, loop-powered (16-35V DC)

User-adjustable temperature compensation (0-4% / deg C)

Selectable measuring ranges

Adjustable zero and span

Direct/reverse operation

Nema 4X enclosure with multiple mounting configurations

The TCSMA model is designed for on-line monitoring of water treatment applications and aggressive process chemicals. This blind transmitter is ideally suited for applications where 4-20mA signals are required and reliable instrumentation is critical.

Key features include: selectable measuring ranges, adjustable temperature compensation (%/deg C), isolated output and reversible cell drive.

A Nema 4x (IP66) enclosure provides durability. A variety of mounting choices are available for Wall, Pipe, or DIN Rail installation.

Pair the TCSMA and TCS3020 toroidal sensors for trouble-free service. TCS3000 and TCS3020 sensors are offered in Noryl construction and can be mounted in a custom flow cell (FC95C) for in-line use.

DESIGNED AND ASSEMBLED IN CALIFORNIA, USA

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TCSMA LOOP POWERED BLIND TOROIDAL CONDUCTIVITY TRANSMITTER

SPECIFICATIONS

Measuring Range	0-100,000 uS, - preset at factory as 4-20mA
Span Range	500-2,500uS / 2,500-1,500uS / 15,000 - 100,000uS / 10,000 - 1,000,000uS
Sensitivity	0.1% of span
Repeatability	0.2% of span
Non-Linearity	1% span for span > 3,000uS/cm ---2% of span for span <3,000uS/cm
Zero Drift	<1% span per month, non-cumulative
Operating Conditions	-20 to 60deg C, 0-95% R.H. non-condensing conditions
Temperature Drift	0.06% of range/degC, span or zero
Stability	0.2% of range per 24 hours, non-cumulative
Power Requirement	16-35V DC (2-wire device)
Insertion Loss	16 V DC
Output Isolation	Inherently isolated by sensor design
Enclosure	NEMA 4X (IP66) polycarbonate, wall, pipe or DIN Rail mount. Weatherproof and corrosion resistant. Dimensions = 4.4" (112 mm) H x 4.4" (112mm) W x 3.5" (89mm) D.
Weight	1lb (0.45Kg)
Conduit Openings	2 each PG-9. Cord grips included
Temperature Input	Pt1000RTD. Compensation adjustable from 0.0%/deg C to 4.0%/deg C
Maximum Cable Length	200ft. (61.0m)
Response Time	5 seconds to 90% full scale

ORDERING INFORMATION

Part Number	Description
TCSMA	Blind, Loop-powered, 4-20mA toroidal conductivity transmitter (16-35VDC power supply not included)
TCS3020	Keyed Noryl® toroidal conductivity sensor. Includes 20ft of cable and tinned wire terminations
FC95C	Keyed CPVC flow cell for TCS3020. Includes nut and o-ring seal

For more details on toroidal conductivity sensors and flow cell, request toroidal conductivity sensor spec sheet or visit www.sensorex.com

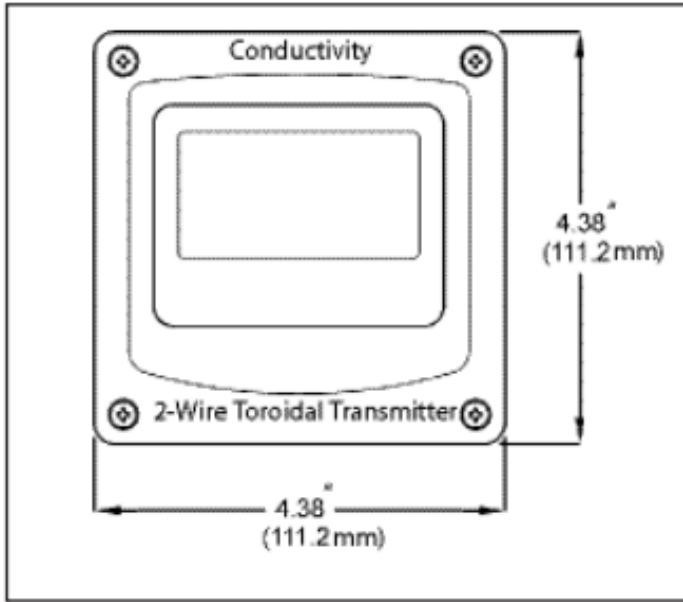
Noryl® is a trademark of SABIC INNOVATIVE PLASTICS IP B.V.

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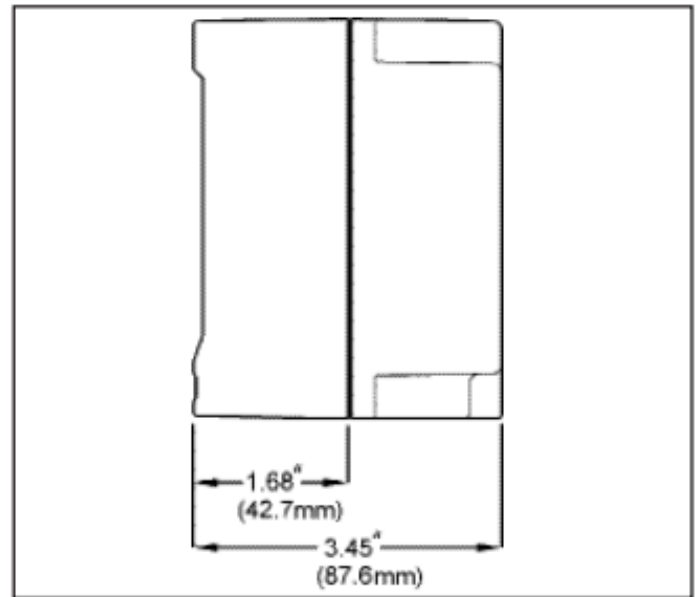
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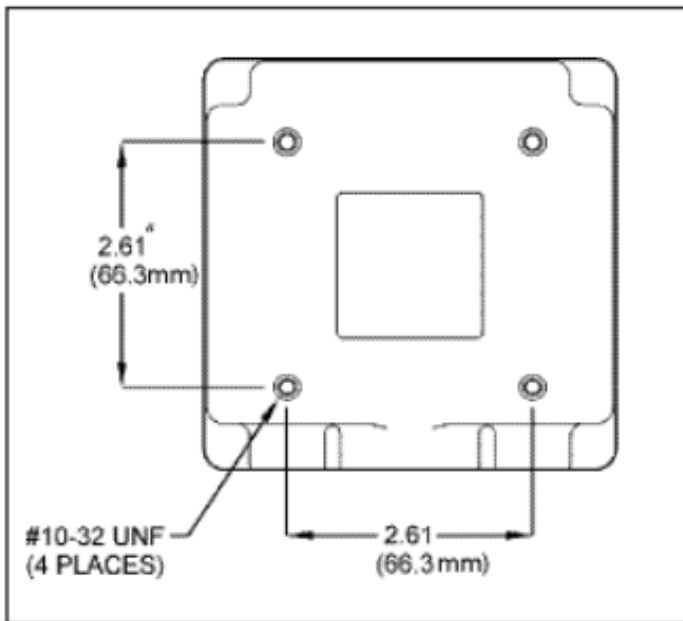
OUTLINE DRAWINGS OF TCSMA



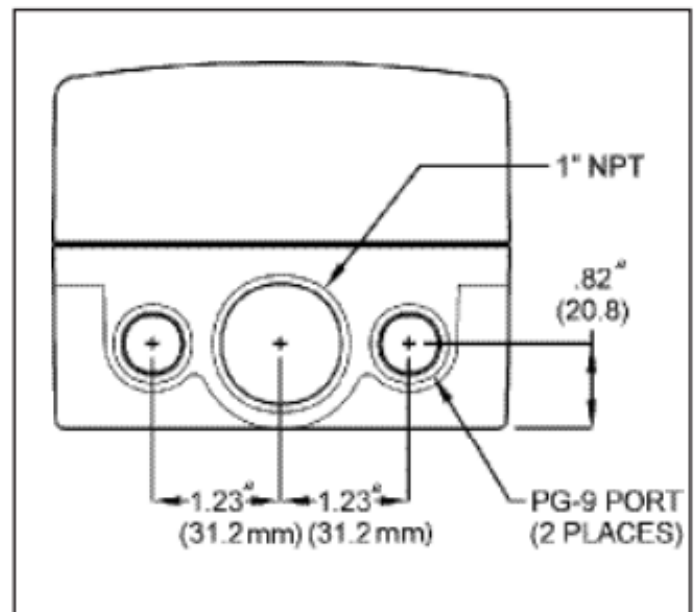
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

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